

CLAIMS

1. A hybrid vehicle in which an engine (E) equipped with pumping loss reduction means is connected to a first driven wheel via a first motor/generator (MG1), an oil pump (13), a first clutch (14), a hydraulic automatic transmission (M), and a second clutch (20), and a second motor/generator (MG2) is connected to a second driven wheel (Wr), the second driven wheel (Wr) being different from the first driven wheel (Wf), characterized in that when the vehicle is made to travel by driving or braking the second driven wheel (Wr) with the second motor/generator (MG2), in order to shift the automatic transmission (M) a hydraulic pressure is generated by driving the oil pump (13) with the first motor/generator (MG1) in a state in which the pumping loss of the engine (E), which has stopped running, is reduced by the pumping loss reduction means and the second clutch (20) is disengaged.
- 15 2. The hybrid vehicle according to Claim 1 wherein, when a deviation of the actual ratio of the automatic transmission (M) from a target ratio exceeds a predetermined value, the automatic transmission (M) is shifted while intermittently engaging the first clutch (14).
3. The hybrid vehicle according to Claim 1 wherein, when the percentage 20 change of a target ratio of the automatic transmission (M) exceeds a predetermined value, the automatic transmission (M) is shifted while continuously engaging the first clutch (14).
4. The hybrid vehicle according to Claim 1 wherein, when the remaining 25 capacity of a battery (28) connected to the first and second motor/generators (MG1, MG2) exceeds a predetermined value, the required driving force of the vehicle is less than a predetermined value, and the pumping loss of the engine

(E) can be reduced, traveling by means of the second motor/generator (MG2) is permitted.

5. The hybrid vehicle according to Claim 4 wherein, when the pumping loss reduction means is operated and traveling is carried out by means of the
5 second motor/generator (MG2), a hydraulic pressure for shifting the automatic transmission (M) is generated by driving the oil pump (13) with the first motor/generator (MG1).

6. The hybrid vehicle according to Claim 1 wherein, when a hydraulic pressure is generated in order to shift the automatic transmission (M) by
10 driving the oil pump (13) with the first motor/generator (MG1), the first clutch (14) is disengaged.